

## Message

**From:** Berkoff, Michael [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=F347C01A92D7424FA840C24F6B7FBF6B-MBERKOFF]  
**Sent:** 12/10/2015 10:06:31 PM  
**To:** Bassler, Rachel [Bassler.Rachel@epa.gov]; Karl, Richard [karl.richard@epa.gov]; Tanaka, Joan [tanaka.joan@epa.gov]; Arcaute, Francisco [Arcaute.Francisco@epa.gov]; Frey, Rebecca [frey.rebecca@epa.gov]; Cannon, Phillippa [Cannon.Phillippa@epa.gov]  
**CC:** Rowan, Anne [rowan.anne@epa.gov]  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

Thank you everyone for working on this so quickly.

---

**From:** Bassler, Rachel  
**Sent:** Thursday, December 10, 2015 4:02 PM  
**To:** Karl, Richard <karl.richard@epa.gov>; Tanaka, Joan <Tanaka.Joan@epa.gov>; Arcaute, Francisco <Arcaute.Francisco@epa.gov>; Berkoff, Michael <berkoff.michael@epa.gov>; Frey, Rebecca <frey.rebecca@epa.gov>; Cannon, Phillippa <Cannon.Phillippa@epa.gov>  
**Cc:** Rowan, Anne <rowan.anne@epa.gov>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

Great, thanks everyone.

Rachel Bassler  
 EPA Region 5  
 bassler.rachel@epa.gov  
 p: 312-886-7159

---

**From:** Karl, Richard  
**Sent:** Thursday, December 10, 2015 3:23 PM  
**To:** Tanaka, Joan <Tanaka.Joan@epa.gov>; Bassler, Rachel <Bassler.Rachel@epa.gov>; Arcaute, Francisco <Arcaute.Francisco@epa.gov>; Berkoff, Michael <berkoff.michael@epa.gov>; Frey, Rebecca <frey.rebecca@epa.gov>; Cannon, Phillippa <Cannon.Phillippa@epa.gov>  
**Cc:** Rowan, Anne <rowan.anne@epa.gov>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

Good to go with me.

---

**From:** Tanaka, Joan  
**Sent:** Thursday, December 10, 2015 3:08 PM  
**To:** Bassler, Rachel <Bassler.Rachel@epa.gov>; Arcaute, Francisco <Arcaute.Francisco@epa.gov>; Karl, Richard <karl.richard@epa.gov>; Berkoff, Michael <berkoff.michael@epa.gov>; Frey, Rebecca <frey.rebecca@epa.gov>; Cannon, Phillippa <Cannon.Phillippa@epa.gov>  
**Cc:** Rowan, Anne <rowan.anne@epa.gov>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

Looks good to me.

Joan Tanaka  
 Remedial Response Branch 1 Chief  
 Superfund Division  
 USEPA Region 5

telephone: 312-353-5425

---

**From:** Bassler, Rachel

**Sent:** Thursday, December 10, 2015 3:06 PM

**To:** Arcaute, Francisco <Arcaute.Francisco@epa.gov>; Karl, Richard <karl.richard@epa.gov>; Berkoff, Michael <berkoff.michael@epa.gov>; Tanaka, Joan <Tanaka.Joan@epa.gov>; Frey, Rebecca <frey.rebecca@epa.gov>; Cannon, Phillippa <Cannon.Phillippa@epa.gov>

**Cc:** Rowan, Anne <rowan.anne@epa.gov>

**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

All,

Here are the latest responses I received. Please let me know if these are good to go or if there are any changes.

Draft responses:

Reporter: Rosemary Parker

Outlet: Kalamazoo Gazette/ MLive Media Group

**My editors agree that we would like to do a more comprehensive story about the processes when your scientists become available, perhaps around the time Kalamazoo city staff meets with you folks and Biopath to discuss the proposal further?**

EPA Region 5 staff is willing to work with Biopath to facilitate a bench-scale study which would determine whether the technology could work for the wastes at Allied Landfill.

**Meanwhile, for the purposes of this story, can you give me some sense of the EPA's level of interest in the proposal?**

EPA is always interested in exploring treatment technologies. Superfund seeks to treat waste whenever possible.

**As I understand it, the general technology of using microorganisms to break down PCBs has been around for quite a while. Are there concerns that this site presents obstacles that might be too difficult for this method to overcome?**

Yes. The nature of waste at Allied Landfill makes any kind of treatment very difficult. The PCBs are tightly bound to clay and wood pulp that make up the former paper waste. EPA previously reviewed the known treatment technologies and their potential applicability to Allied Landfill. Our evaluation of technologies concluded that none of the technologies (including bioremediation) were a match for the waste at Allied Landfill. These studies are available on our site Web page.

<http://www3.epa.gov/region5/cleanup/alliedpaper/>

**Or has Biopath introduced something new that makes this an exciting possibility?**

EPA does not know. That can only be determined with a bench-scale study that meets rigorous standards. Our understanding of the Biopath technology to-date factored into our past conclusions that bioremediation would not be effective at the site.

Rachel Bassler

EPA Region 5

bassler.rachel@epa.gov

p: 312-886-7159

---

**From:** Arcaute, Francisco  
**Sent:** Thursday, December 10, 2015 2:04 PM  
**To:** Karl, Richard <[karl.richard@epa.gov](mailto:karl.richard@epa.gov)>; Berkoff, Michael <[berkoff.michael@epa.gov](mailto:berkoff.michael@epa.gov)>; Tanaka, Joan <[Tanaka.Joan@epa.gov](mailto:Tanaka.Joan@epa.gov)>; Frey, Rebecca <[frey.rebecca@epa.gov](mailto:frey.rebecca@epa.gov)>; Cannon, Phillippa <[Cannon.Phillippa@epa.gov](mailto:Cannon.Phillippa@epa.gov)>; Bassler, Rachel <[Bassler.Rachel@epa.gov](mailto:Bassler.Rachel@epa.gov)>  
**Cc:** Rowan, Anne <[rowan.anne@epa.gov](mailto:rowan.anne@epa.gov)>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

Handing over to Rachel because I'm busy with Pilsen.

---

**From:** Karl, Richard  
**Sent:** Thursday, December 10, 2015 1:53 PM  
**To:** Berkoff, Michael <[berkoff.michael@epa.gov](mailto:berkoff.michael@epa.gov)>; Tanaka, Joan <[Tanaka.Joan@epa.gov](mailto:Tanaka.Joan@epa.gov)>; Frey, Rebecca <[frey.rebecca@epa.gov](mailto:frey.rebecca@epa.gov)>; Cannon, Phillippa <[Cannon.Phillippa@epa.gov](mailto:Cannon.Phillippa@epa.gov)>  
**Cc:** Rowan, Anne <[rowan.anne@epa.gov](mailto:rowan.anne@epa.gov)>; Arcaute, Francisco <[Arcaute.Francisco@epa.gov](mailto:Arcaute.Francisco@epa.gov)>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

I thought we were providing written responses.

---

**From:** Berkoff, Michael  
**Sent:** Thursday, December 10, 2015 1:51 PM  
**To:** Karl, Richard <[karl.richard@epa.gov](mailto:karl.richard@epa.gov)>; Tanaka, Joan <[Tanaka.Joan@epa.gov](mailto:Tanaka.Joan@epa.gov)>; Frey, Rebecca <[frey.rebecca@epa.gov](mailto:frey.rebecca@epa.gov)>; Cannon, Phillippa <[Cannon.Phillippa@epa.gov](mailto:Cannon.Phillippa@epa.gov)>  
**Cc:** Rowan, Anne <[rowan.anne@epa.gov](mailto:rowan.anne@epa.gov)>; Arcaute, Francisco <[Arcaute.Francisco@epa.gov](mailto:Arcaute.Francisco@epa.gov)>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

All,  
 Are we ready for Cisco and I to call the reporter back and conduct this interview?  
 Michael

---

**From:** Karl, Richard  
**Sent:** Thursday, December 10, 2015 1:43 PM  
**To:** Tanaka, Joan <[Tanaka.Joan@epa.gov](mailto:Tanaka.Joan@epa.gov)>; Frey, Rebecca <[frey.rebecca@epa.gov](mailto:frey.rebecca@epa.gov)>; Cannon, Phillippa <[Cannon.Phillippa@epa.gov](mailto:Cannon.Phillippa@epa.gov)>  
**Cc:** Rowan, Anne <[rowan.anne@epa.gov](mailto:rowan.anne@epa.gov)>; Arcaute, Francisco <[Arcaute.Francisco@epa.gov](mailto:Arcaute.Francisco@epa.gov)>; Berkoff, Michael <[berkoff.michael@epa.gov](mailto:berkoff.michael@epa.gov)>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

I like Joan and Becky's edits.

---

**From:** Tanaka, Joan  
**Sent:** Thursday, December 10, 2015 1:39 PM  
**To:** Frey, Rebecca <[frey.rebecca@epa.gov](mailto:frey.rebecca@epa.gov)>; Cannon, Phillippa <[Cannon.Phillippa@epa.gov](mailto:Cannon.Phillippa@epa.gov)>  
**Cc:** Karl, Richard <[karl.richard@epa.gov](mailto:karl.richard@epa.gov)>; Rowan, Anne <[rowan.anne@epa.gov](mailto:rowan.anne@epa.gov)>; Arcaute, Francisco <[Arcaute.Francisco@epa.gov](mailto:Arcaute.Francisco@epa.gov)>; Berkoff, Michael <[berkoff.michael@epa.gov](mailto:berkoff.michael@epa.gov)>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

My edits incorporated below.

Joan Tanaka  
 Remedial Response Branch 1 Chief  
 Superfund Division  
 USEPA Region 5  
 telephone: 312-353-5425

---

**From:** Frey, Rebecca  
**Sent:** Thursday, December 10, 2015 12:14 PM  
**To:** Cannon, Phillippa <Cannon.Phillippa@epa.gov>  
**Cc:** Karl, Richard <karl.richard@epa.gov>; Rowan, Anne <rowan.anne@epa.gov>; Arcaute, Francisco <Arcaute.Francisco@epa.gov>; Tanaka, Joan <Tanaka.Joan@epa.gov>; Berkoff, Michael <berkoff.michael@epa.gov>  
**Subject:** RE: Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill - suggested revisions

My suggested changes to the draft answers is shown below in green font. I'm also cc'ing Joan Tanaka for her input (and also copying Michael).

Thanks,  
 -Becky

---

**From:** Cannon, Phillippa  
**Sent:** Thursday, December 10, 2015 11:30 AM  
**To:** Karl, Richard <karl.richard@epa.gov>; Rowan, Anne <rowan.anne@epa.gov>; Arcaute, Francisco <Arcaute.Francisco@epa.gov>; Frey, Rebecca <frey.rebecca@epa.gov>  
**Subject:** Proposed answers to Kzoo Gazette about bioremediation at Allied Landfill

Here are Mike Berkoff's proposed answers to the questions about the Biopath proposal to use bioremediation at the site:

Thanks for agreeing to respond in brief to the EPA's interest in Biopath's proposal to use bioremediation at the Allied landfill site.

My editors agree that we would like to do a more comprehensive story about the processes when your scientists become available, perhaps around the time Kalamazoo city staff meets with you folks and Biopath to discuss the proposal further?

EPA Region 5 staff is willing to work with Biopath to facilitate a bench-scale study which would determine whether the technology could work for the wastes at Allied Landfill.

Meanwhile, for the purposes of this story, can you give me some sense of the EPA's level of interest in the proposal?

EPA is always interested in exploring treatment technologies. Superfund seeks to treat waste whenever possible.

As I understand it, the general technology of using microorganisms to break down PCBs has been around for quite a while. Are there concerns that this site presents obstacles that might be too difficult for this method to overcome?

Yes. The nature of waste at Allied Landfill makes any kind of treatment very difficult. The PCBs are tightly bound to clay and wood pulp that make up the former paper waste. EPA has previously reviewed the known treatment technologies and their potential applicability to Allied Landfill. Our evaluation of technologies concluded that none of the technologies (including bioremediation) were a match for the waste at Allied Landfill. These studies are available on our site webpage.

<http://www3.epa.gov/region5/cleanup/alliedpaper/>

Or has Biopath introduced something new that makes this an exciting possibility?

EPA does not know. That can only be determined with a bench-scale study that meets rigorous standards. Our understanding of the Biopath technology to-date factored into our past conclusions that bioremediation would not be effective at the site.

Again, this story is basically little explanation of how the process works (or is intended to work), what advantages (besides lower cost) it offers, and how the city and EPA will go about deciding whether it is a good fit for this particular site. Any light you could shed on that would be very helpful.

Rosemary Parker  
Kalamazoo Gazette/ MLive Media Group

Phillippa Cannon  
Superfund Division  
U.S. EPA Region 5  
312-353-6218